

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Principal facts for two-hundred-thirty-three gravity stations near the  
Three Sisters Wilderness Area, Oregon

by

Carol Finn

D. R. Spydell

and

D. L. Williams

Open File Report 85-283

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This report is preliminary and has not been reviewed for  
conformity with U.S. Geological Survey editorial standards.

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Explanation of the headings of the accompanying table of principal facts are as follows:

STATION IDENTIFICATION	All stations were taken with LaCoste and Romberg <sup>1</sup> gravity meter G-550. For a complete description of the gravity reduction procedures currently in use by most people in the U.S. Geological Survey (USGS) for defining the corrections and anomalies, see Cordell and others (1982).
LATITUDE AND LONGITUDE	Values listed are in degrees and minutes to the nearest one hundredth of a minute (accurate to one tenth of a minute). To obtain the positions of the gravity stations, the stations were transferred from U.S. Forest Service and USGS aerial photographs to USGS 1:62,500 topographic quadrangle maps and then were digitized.
ELEVATION	Elevations are in feet to the nearest tenth. Some elevations were taken from spot elevations (accurate to about ±5 feet) from USGS 1:62,500 scale topographic quadrangle maps having a contour interval of 80 feet. Others were read on

<sup>1</sup>Use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey.

a Kern<sup>1</sup> PG2 stereo plotter from USGS aerial photographs. Several elevation readings were taken for each station and averaged to obtain the station elevation. Errors associated with this method are: (1) errors in the setup of the photogrammetric model, (2) possible errors in benchmark or spot-elevation values, (3) the difference between (our reading of benchmarks and the actual value) about 10-15 feet, and (4) the scatter of elevation data collected for each gravity station about some mean value, assumed to be the real station elevation. These errors were not evaluated due to a lack of information for analysis.

#### OBSERVED GRAVITY

Values are to the nearest hundredth of a milligal. All stations are relative to IGSN-71 (Morelli, 1974) tied to a base at Redmond, Oregon, having observed gravity equal to 980247.29 mgals.

#### THEORETICAL GRAVITY

Values were calculated using the Geodetic Reference System 1967 (International Association of Geodesy, 1971).

#### TERRAIN CORRECTIONS

Most of the stations were corrected for terrain by computer radially from the station to 166.7 km

(Richard Godson, unpublished program , U.S. Geological Survey), implementing the procedure of Plouff (1977). Some of the inner zone terrain corrections (Hammer zones D-F, Hammer, 1939) were done by template. The density used in these corrections was  $2.67 \text{ g/cm}^3$ .

CURV

Curvature correction in milligals.

SPECIAL

Not used.

FREE-AIR ANOMALY

Free-air anomaly values are in milligals. The free-air correction was obtained by the following calculation: observed gravity - theoretical gravity - free-air anomaly = free-air correction.

COMPLETE BOUGUER ANOMALY

Complete Bouguer anomaly values are in milligals using densities of  $2.67$  and  $2.43 \text{ g/cm}^3$ .

REFERENCES CITED

Cordell, L., Keller, G. R., and Hildenbrand, T. G., 1982, Bouguer gravity map of the Rio Grande Rift: U.S. Geological Survey Geophysical Investigations Map GP-949.

Hammer, Sigmund, 1939, Terrain corrections for gravimeter stations: Geophysics, v. 4, p. 184-194.

International Association of Geodesy, 1971, Geodetic reference system 1967: International Association of Geodesy Special Publication no. 3 (Bureau Central Association International Geodesie, Paris), 116 p.

Morelli, C., ed., 1974, The International Standardization Net 1971: International Association of Geodesy Special Publication No. 4, 194 p.

Plouff, Donald, 1977, Preliminary documentation for a Fortran program to compute gravity-terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-535, 45 p.

three sisters wilderness -- gravity data  
collected 1980 & 1981 spudell  
2q-550

Date: 21-JAN-1985 16:42:15.25

STATION IDENTIFICATION PROJ	LATITUDE deg min min	LONGITUDE deg min min	ELE (in mt)	O N S ST OBSERVED	THEORETICAL	TERRAIN BORING/FR CURV	SPECIAL (d1=2.67)	C U R R E C T I O N S		A N O M A L I F S FREE COMPLETE-HUGUER AIR d1=2.67 d2=2.43 FIELDS
								G R A V I T Y	C U R R E C T I O N	
: 3SIS001 44 6.85 -121 37.56 1924.81 OR 980027.49 980538.89	5.32 -215.39 -1.51	0.00	82.25 -129.33 -110.31							
: 3SIS001 44 6.85 -121 37.56 1924.81 OR 980027.50 980538.89	5.32 -215.39 -1.51	0.00	82.26 -129.32 -110.30							
: 3SIS002 44 6.96 -121 42.20 1877.57 OR 980042.82 980539.05	6.55 -210.10 -1.50	0.00	82.45 -122.20 -103.77							
: 3SIS003 44 6.41 -121 43.69 2125.98 OR 979982.69 980538.23	6.94 -237.90 -1.52	0.00	100.12 -132.35 -111.46							
: 3SIS004 44 4.96 -121 43.66 1999.49 OR 980012.70 980536.04	6.54 -223.74 -1.52	0.00	93.33 -125.39 -105.73							
: 3SIS005 44 3.78 -121 44.36 1830.33 OR 980045.57 980534.26	6.01 -204.81 -1.50	0.00	75.83 -124.47 -106.46							
: 3SIS006 44 3.81 -121 45.58 1980.29 OR 980011.94 980534.30	5.51 -221.59 -1.51	0.00	88.38 -129.22 -109.66							
: 3SIS007 44 3.30 -121 46.39 2030.88 OR 979993.37 980533.54	5.71 -227.26 -1.52	0.00	96.17 -136.89 -116.84							
: 3SIS008 44 2.89 -121 47.42 1855.01 OR 980034.98 980532.92	5.01 -207.58 -1.50	0.00	74.18 -129.68 -111.54							
: 3SIS009 44 2.54 -121 47.50 1844.95 OR 980037.20 980532.39	4.24 -206.45 -1.50	0.00	73.84 -129.87 -111.56							
: 3SIS010 44 2.21 -121 46.78 1739.19 OR 980056.19 980531.90	4.05 -194.62 -1.48	0.00	60.71 -131.33 -114.07							
: 3SIS011 44 2.31 -121 46.20 1675.79 OR 980067.26 980532.05	5.45 -187.52 -1.46	0.00	52.09 -131.45 -114.95							
: 3SIS012 44 2.15 -121 45.85 1666.95 OR 980070.65 980531.90	5.07 -186.53 -1.46	0.00	52.49 -129.93 -113.48							
: 3SIS013 43 59.85 -121 47.13 1548.38 OR 980091.37 980528.34	2.71 -173.26 -1.42	0.00	49.62 -131.35 -115.89							
: 3SIS014 43 58.92 -121 49.46 1594.10 OR 980078.24 980526.94	2.14 -178.38 -1.44	0.00	42.99 -134.68 -118.71							
: 3SIS015 43 58.96 -121 50.77 1586.48 OR 980082.28 980526.99	2.91 -177.53 -1.43	0.00	44.63 -131.42 -115.60							
: 3SIS016 43 58.58 -121 51.61 1631.90 OR 980073.45 980526.42	3.49 -182.61 -1.45	0.00	50.38 -130.19 -113.96							
: 3SIS017 43 59.21 -121 53.13 1718.46 OR 980056.31 980527.38	3.77 -192.30 -1.47	0.00	58.97 -131.03 -113.95							
: 3SIS018 43 58.57 -121 53.51 1696.21 OR 980059.09 980526.41	3.00 -189.81 -1.47	0.00	55.86 -132.41 -115.49							
: 3SIS019 43 58.14 -121 53.98 1643.48 OR 980066.69 980525.76	2.59 -183.91 -1.45	0.00	47.84 -134.92 -118.49							
: 3SIS020 43 57.53 -121 54.53 1573.07 OR 980079.03 980524.84	2.66 -176.03 -1.43	0.00	39.39 -135.40 -119.69							
: 3SIS021 43 56.87 -121 54.91 1445.97 OR 980107.01 980523.64	2.15 -161.80 -1.38	0.00	29.18 -131.85 -117.34							
: 3SIS022 43 57.88 -121 55.67 1463.04 OR 980102.41 980525.37	3.71 -163.71 -1.39	0.00	28.32 -133.07 -118.57							
: 3SIS023 43 58.67 -121 56.45 1531.62 OR 980089.82 980526.55	2.36 -171.39 -1.41	0.00	35.69 -134.75 -119.43							
: 3SIS024 44 0.44 -121 57.19 1374.65 OR 980119.62 980529.23	3.03 -153.82 -1.34	0.00	14.41 -137.72 -124.05							
: 3SIS025 43 59.84 -121 54.18 1650.49 OR 980064.03 980528.32	3.42 -184.69 -1.45	0.00	44.79 -137.94 -121.51							
: 3SIS026 43 59.86 -121 52.15 1495.04 OR 980102.88 980528.35	3.42 -167.29 -1.40	0.00	35.68 -129.60 -114.85							
: 3SIS027 43 59.98 -121 50.71 1584.05 OR 980085.94 980528.53	2.36 -177.26 -1.43	0.00	45.00 -130.33 -114.98							
: 3SIS028 43 59.75 -121 49.63 1606.91 OR 980077.63 980528.19	2.17 -179.81 -1.44	0.00	45.08 -134.00 -117.90							
: 3SIS029 43 59.75 -121 47.98 1562.40 OR 980086.19 980528.19	2.24 -174.83 -1.43	0.00	39.91 -134.10 -118.46							
: 3SIS030 44 1.60 -121 49.60 1967.79 OR 979996.57 980530.98	8.59 -220.20 -1.51	0.00	72.49 -140.63 -121.47							
: 3SIS031 44 2.21 -121 50.02 1833.07 OR 980036.30 980531.90	3.77 -205.12 -1.50	0.00	69.76 -134.04 -114.85							
: 3SIS032 44 2.52 -121 49.40 1928.80 OR 980038.61 980532.36	3.98 -204.64 -1.50	0.00	70.30 -131.86 -115.64							
: 3SIS033 44 2.85 -121 49.75 1833.69 OR 980044.32 980532.86	4.43 -205.19 -1.50	0.00	74.01 -125.24 -107.06							
: 3SIS034 44 2.72 -121 50.15 1791.31 OR 980045.91 980532.66	4.25 -200.45 -1.49	0.00	65.73 -131.95 -114.18							
: 3SIS035 44 3.10 -121 52.55 1520.65 OR 980110.95 980533.23	5.60 -170.16 -1.41	0.00	46.76 -119.21 -104.29							
: 3SIS036 44 3.10 -121 57.10 1264.92 OR 980159.43 980533.23	2.44 -141.54 -1.29	0.00	16.34 -124.01 -111.39							
: 3SIS037 44 0.70 -121 52.80 1488.34 OR 980108.54 980529.62	2.90 -166.55 -1.40	0.00	34.00 -127.14 -112.30							
: 3SIS038 44 0.53 -121 47.69 1619.40 OR 980076.39 980529.36	2.68 -181.21 -1.44	0.00	47.72 -133.45 -117.28							
: 3SIS039 44 1.06 -121 47.30 1656.28 OR 980073.40 980530.16	2.84 -185.34 -1.46	0.00	54.04 -124.86 -113.32							

three sisters wilderness -- gravity data  
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2q-550

### HUGUER GRAVITY DATA

Date: 21-JAN-1985 16:42:17.74

STATION IDENTIFICATION proj st-id	LATITUDE deg min deg min	LONGITUDE deg min deg min	ELEVATION (in mt)	GRAVITY			CORRECTION			TERRAIN			SPECIAL			AVERAGE		SPEC AIR d1=2.07 d2=2.43 FIELDS
				ST OBSERVED	THEORETICAL	CURV	TERAIW	ROUGUER	CURV	FREE AIR	CORRECTED	AIR	GRADIENT	ANGLE	ANGLE	ANGLE	ANGLE	
: 3SIS040 44 1.33 -121 48.01 1735.53 UR 980055.70 980530.57 3.12 -194.21 -1.48 0.00 60.43 -132.14 -114.83																		
: 3SIS041 44 1.42 -121 48.81 1768.14 UR 980049.77 980530.70 3.17 -197.85 -1.48 0.00 64.42 -131.75 -114.12																		
: 3SIS042 44 1.85 -121 48.99 1788.26 UR 980045.78 980531.35 3.61 -200.11 -1.49 0.00 65.98 -131.80 -114.03																		
: 3SIS043 44 2.42 -121 49.28 1826.36 UR 980039.66 980532.21 3.63 -204.37 -1.50 0.00 70.74 -131.49 -113.31																		
: 3SIS044 44 2.69 -121 48.53 1861.11 UR 980034.27 980532.62 4.06 -208.26 -1.50 0.00 75.07 -130.03 -111.54																		
: 3SIS045 44 3.49 -121 48.57 1878.79 UR 980031.83 980533.62 4.81 -210.24 -1.50 0.00 77.47 -129.46 -110.60																		
: 3SIS046 44 3.05 -121 48.17 1911.71 UR 980022.11 980533.16 4.16 -213.92 -1.51 0.00 78.55 -132.71 -113.72																		
: 3SIS047 44 2.59 -121 47.74 1860.50 UR 980034.25 980532.47 4.02 -208.19 -1.50 0.00 75.60 -130.97 -111.58																		
: 3SIS048 44 1.93 -121 47.20 1742.54 UR 980055.47 980531.47 3.67 -194.99 -1.48 0.00 61.40 -131.34 -114.01																		
: 3SIS049 44 0.45 -121 47.74 1617.88 UR 980077.16 980529.24 2.52 -181.04 -1.44 0.00 40.93 -133.03 -116.85																		
: 3SIS050 43 58.83 121 46.65 1509.67 UK 980094.58 980526.80 2.47 -168.93 -1.41 0.00 33.44 -134.43 -116.34																		
: 3SIS051 43 58.41 -121 46.20 1553.87 UK 980083.85 980526.16 2.21 -173.88 -1.42 0.00 36.97 -136.12 -120.56																		
: 3SIS052 43 58.81 -121 45.53 1552.96 UK 980086.44 980526.77 2.46 -173.78 -1.42 0.00 38.67 -134.07 -118.54																		
: 3SIS053 43 57.58 -121 44.40 1660.55 UK 980066.62 980524.91 4.99 -185.82 -1.46 0.00 53.88 -128.40 -112.02																		
: 3SIS054 44 0.82 -121 45.27 1769.97 UK 980043.22 980529.80 4.01 -198.06 -1.48 0.00 59.33 -136.20 -116.62																		
: 3SIS055 44 0.97 -121 45.29 1840.99 UK 980022.22 980530.02 6.77 -206.01 -1.50 0.00 60.09 -140.73 -122.69																		
: 3SIS056 44 1.40 -121 45.79 1747.11 UK 980052.19 980530.67 3.58 -195.50 -1.48 0.00 60.38 -133.02 -115.64																		
: 3SIS057 44 1.72 -121 45.38 1848.61 UK 980023.02 980531.16 6.20 -208.86 -1.50 0.00 62.62 -139.54 -121.37																		
: 3SIS058 43 52.94 -121 46.18 1430.12 UK 980091.81 980517.92 1.46 -160.03 -1.37 0.00 15.02 -144.92 -130.55																		
: 3SIS059 43 53.63 -121 46.03 1449.63 UK 980091.01 980518.96 1.54 -162.21 -1.38 0.00 19.19 -142.86 -128.30																		
: 3SIS060 43 55.23 -121 46.90 1476.45 UK 980093.45 980521.36 1.78 -165.21 -1.39 0.00 27.49 -137.33 -122.52																		
: 3SIS061 43 57.64 -121 48.25 1500.84 UK 980095.06 980525.01 2.31 -167.94 -1.40 0.00 32.99 -134.05 -119.03																		
: 3SIS062 43 58.55 -121 48.47 1507.85 UK 980095.11 980526.36 2.20 -168.73 -1.40 0.00 33.83 -134.10 -119.01																		
: 3SIS063 44 1.53 -121 43.44 1661.77 UK 980073.59 980530.87 5.16 -185.95 -1.46 0.00 55.28 -126.97 -110.59																		
: 3SIS064 43 55.02 -121 49.05 1760.22 UK 980032.34 980521.05 3.49 -196.97 -1.48 0.00 54.20 -140.76 -123.24																		
: 3SIS065 43 51.84 -121 53.99 1482.55 UK 980090.52 980516.27 2.15 -165.90 -1.39 0.00 31.55 -133.59 -118.14																		
: 3SIS066 43 49.49 -121 56.74 1755.65 UK 980092.85 980512.73 3.54 -196.46 -1.48 0.00 121.62 -72.77 -55.30																		
: 3SIS067 43 51.36 -121 58.81 1978.15 UK 979979.53 980515.54 8.75 -221.35 -1.51 0.00 74.90 -140.03 -120.79																		
: 3SIS068 43 54.07 -121 58.96 1440.18 UK 980099.50 980519.63 2.83 -161.16 -1.38 0.00 24.11 -135.60 -121.24																		
: 3SIS069 43 56.66 -121 58.48 1409.70 UK 980112.27 980523.53 2.83 -157.75 -1.36 0.00 23.57 -132.70 -118.66																		
: 3SIS070 43 59.24 -121 53.70 1848.00 UK 980012.75 980527.41 6.43 -206.79 -1.50 0.00 56.30 -144.56 -126.59																		
: 3SIS071 44 6.07 -121 46.15 3112.92 UK 979731.06 980537.71 5.81 -348.34 -1.14 0.00 153.70 -141.90 -115.32																		
: 3SIS072 44 5.28 -121 42.86 2415.54 UK 979911.97 980536.52 20.50 -270.30 -1.48 0.00 63.22 -123.04 -106.30																		
: 3SIS073 44 6.49 -121 40.49 2281.43 UK 979444.78 980536.34 13.60 -255.29 -1.50 0.00 67.28 -131.29 -113.44																		
: 3SIS074 44 5.13 -121 40.10 2438.40 UK 979914.14 980536.36 12.17 -272.86 -1.47 0.00 97.70 -136.06 -116.48																		
: 3SIS075 44 3.93 -121 40.43 2452.12 UK 979403.83 980534.46 17.27 -274.39 -1.47 0.00 77.01 -129.71 -110.49																		
: 3SIS076 44 2.48 -121 42.76 1704.75 UK 980009.72 980532.30 5.97 -190.76 -1.47 0.00 60.00 -153.70 -141.90 -115.32																		
: 3SIS077 44 1.26 -121 45.54 1794.36 UK 980444.31 980530.46 3.71 -200.79 -1.49 0.00 67.28 -131.29 -113.44																		
: 3SIS078 44 2.97 -121 46.80 2078.13 UK 979979.49 980533.04 9.64 -232.54 -1.52 0.00 97.70 -136.06 -116.48																		
: 3SIS079 44 1.88 -121 47.77 1867.20 UK 980032.52 980531.40 4.42 -208.94 -1.35 0.00 77.01 -129.71 -110.49																		

three sisters wilderness -- gravity data  
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2q-550

Date: 21-JAN-1981, 16:42:20.55

STATION IDENTIFICATION proj	STA-TI LATITUDE deg	LONGITUDE deg	ELE- min deq	N-S ST OBSERVED (in mts)	GRAVITY THEORETICAL (d1=2.67)	TERRAIN HUUUGUFUR CURV	SPECIAL	C U R R E C T I O N S		SPEC AIR	COMPLTE-BUGUEFA d1=2.67 d2=2.43	SPEC FITTED
								C U R R A N U M A L I E S	AIR			
: 3SIS080 44 2.46 -121 52.43 1927.25 OR 980006.12 980532.27 13.08 -215.66 -1.51 0.00 68.24 -135.85 -117.50												
: 3SIS081 44 4.11 -121 51.33 1888.54 OR 980030.98 980534.16 8.78 -211.33 -1.50 0.00 74.68 -125.37 -107.03												
: 3SIS082 44 3.75 -121 49.66 2142.74 OR 979963.91 980534.22 18.42 -239.77 -1.52 0.00 90.51 -132.35 -112.32												
: 3SIS083 44 6.40 -121 50.33 1750.17 UR 980068.49 980538.21 5.28 -195.84 -1.48 0.00 70.09 -121.96 -104.69												
: 3SIS084 44 7.20 -121 50.91 2042.16 UR 980000.90 980539.41 11.01 -228.52 -1.52 0.00 91.31 -127.72 -108.03												
: 3SIS085 44 7.42 -121 47.64 2206.75 OR 979967.51 980539.75 11.41 -246.94 -1.51 0.00 104.31 -128.72 -107.41												
: 3SIS086 44 7.63 -121 45.98 2214.07 OR 979953.69 980540.06 9.41 -247.75 -1.51 0.00 96.44 -143.42 -121.86												
: 3SIS087 44 6.82 -121 44.81 2380.49 OR 979930.04 980536.84 12.48 -266.38 -1.48 0.00 125.30 -130.08 -107.12												
: 3SIS088 44 5.21 -121 45.91 2354.58 UR 979913.68 980536.41 17.68 -263.48 -1.49 0.00 103.39 -143.90 -121.67												
: 3SIS089 44 4.22 -121 41.98 2471.01 OR 979897.18 980534.92 19.80 -276.51 -1.46 0.00 124.27 -133.90 -110.70												
: 3SIS090 44 3.65 -121 42.83 2038.20 OR 979997.00 980534.06 6.77 -229.07 -1.52 0.00 91.54 -131.28 -111.25												
: 3SIS091 43 58.31 -121 49.67 1754.12 UR 980039.52 980526.02 4.41 -196.29 -1.46 0.00 54.53 -138.82 -121.44												
: 3SIS092 43 58.10 -121 41.25 2296.67 UR 979916.37 980525.70 13.82 -257.00 -1.50 0.00 98.94 -145.74 -123.74												
: 3SIS093 43 57.11 -121 40.67 2238.76 UR 979919.24 980524.21 15.38 -250.52 -1.51 0.00 85.46 -151.19 -129.92												
: 3SIS094 43 52.38 -121 51.00 1560.58 OR 980073.85 980517.08 1.56 -174.63 -1.42 0.00 38.13 -136.36 -120.68												
: 3SIS095 43 50.24 -121 56.94 1724.25 OR 980035.73 980513.85 2.66 -192.94 -1.47 0.00 53.69 -138.06 -120.83												
: 3SIS096 43 50.73 -121 57.91 1839.16 OR 980007.81 980514.59 4.52 -205.80 -1.50 0.00 60.46 -142.32 -124.09												
: 3SIS097 43 51.90 -121 58.32 1911.10 OR 979996.72 980516.35 6.00 -213.85 -1.51 0.00 69.79 -139.57 -120.75												
: 3SIS098 43 48.58 -121 57.85 1693.16 OR 980040.39 980511.35 2.25 -189.46 -1.47 0.00 51.27 -137.41 -120.45												
: 3SIS099 43 49.76 -121 55.35 1600.81 OR 980062.24 980513.13 2.27 -179.13 -1.44 0.00 42.87 -135.43 -119.40												
: 3SIS101 44 1.07 -121 47.30 1656.59 OR 980072.81 980530.18 2.85 -145.37 -1.46 0.00 53.59 -130.39 -113.85												
: 3SIS102 44 1.34 -121 48.01 1735.53 OR 980056.30 980530.59 3.15 -194.21 -1.48 0.00 61.00 -131.53 -114.22												
: 3SIS103 44 1.59 -121 48.95 1787.65 OR 980046.49 980530.96 3.45 -200.04 -1.49 0.00 66.89 -131.18 -113.38												
: 3SIS104 44 3.04 -121 51.05 1663.60 OR 980032.12 980533.15 4.23 -186.16 -1.46 0.00 12.09 -171.30 -154.82												
: 3SIS105A 44 2.48 -121 49.58 1828.80 OR 980040.48 980532.30 3.69 -204.64 -1.50 0.00 72.22 -130.23 -112.03												
: 3SIS105B 44 2.48 -121 49.58 1828.80 OR 980039.71 980532.30 3.69 -204.64 -1.50 0.00 71.46 -130.99 -112.80												
: 3SIS106 44 2.68 -121 48.52 1861.11 UR 980035.65 980532.60 4.01 -208.26 -1.50 0.00 77.06 -128.69 -110.20												
: 3SIS107 44 3.50 -121 48.58 1877.87 OR 980033.55 980533.84 4.69 -210.13 -1.50 0.00 78.89 -128.06 -109.46												
: 3SIS108 44 4.80 -121 49.02 1737.36 OR 980061.26 980535.80 6.41 -194.41 -1.48 0.00 61.32 -128.16 -111.13												
: 3SIS109 44 5.74 -121 49.82 1796.49 OR 980057.70 980537.22 5.49 -201.03 -1.49 0.00 74.57 -122.46 -104.75												
: 3SIS110A 44 5.95 -121 50.37 1738.88 UR 980067.69 980537.53 5.07 -194.58 -1.48 0.00 66.48 -124.51 -107.34												
: 3SIS110B 44 5.95 -121 50.37 1738.88 OR 980067.23 980537.53 5.07 -194.58 -1.48 0.00 65.02 -124.97 -107.60												
: 3SIS111 44 6.42 -121 49.71 1826.67 OR 980048.48 980538.24 5.52 -204.40 -1.50 0.00 73.63 -126.75 -108.74												
: 3SIS112 44 7.15 -121 49.91 1871.78 OR 980041.88 980539.34 5.59 -209.45 -1.50 0.00 79.84 -125.53 -107.07												
: 3SIS113 44 7.52 -121 49.24 1920.24 OR 980037.18 980539.90 6.28 -214.87 -1.51 0.00 99.52 -120.58 -101.70												
: 3SIS114 44 6.91 -121 48.60 1970.53 OR 980018.72 980538.98 7.28 -220.50 -1.51 0.00 87.48 -127.25 -107.95												
: 3SIS115 44 5.83 -121 48.69 1921.15 OR 980022.65 980537.35 8.90 -214.98 -1.51 0.00 77.97 -129.77 -111.11												
: 3SIS116 44 4.84 -121 48.15 1852.27 OR 980035.83 980535.86 9.86 -207.27 -1.50 0.00 71.25 -127.65 -109.78												
: 3SIS117 44 4.62 -121 47.47 1994.00 UR 980006.23 980535.53 7.26 -223.13 -1.51 0.00 85.67 -131.71 -112.17												
: 3SIS118 44 3.75 -121 46.43 1971.45 OR 980013.21 980534.42 6.27 -220.61 -1.51 0.00 81.02 -128.83 -109.53												

three Sisters wilderness -- gravity data  
collected 1980 & 1981 spydell  
2g-550

BOUGUER GRAVITY DATA

Date: 21-JAN-1985 16:42:23.26

STATION IDENTIFICATION proj sta-id	LOCATIONS			GRAVITY		CORRECTION		TERRAIN BOUGUER CURV		SPECIAL		ANOMALIES	
	LATITUDE deg min min	LONGITUDE deg min min	ELEV. (in mt)	ST OBSERVED	THEORETICAL	(d1=2.67)	AIR	COMPLETE-BOUGUER	FREE AIR	CUMPLTE-BOUGUER	SPEC FIELDS	d1=2.67 d2=2.43	
: 3SIS119A 44 3.70 -121 45.78 1965.96 OR 980011.60 980534.14 0.07 -219.99 -1.51 0.00 83.79 -131.64 -112.28													
: 3SIS119B 44 3.70 -121 45.78 1965.96 OR 980012.39 980534.14 0.07 -219.99 -1.51 0.00 84.58 -130.85 -111.49													
: 3SIS121 44 3.73 -121 45.15 1937.31 OR 980020.59 980534.19 0.34 -216.78 -1.51 0.00 83.91 -129.05 -109.91													
: 3SIS120 44 3.88 -121 45.53 1967.18 OR 980014.10 980534.41 0.85 -220.13 -1.51 0.00 86.40 -129.39 -110.00													
: 3SIS122 44 3.47 -121 45.03 1905.61 OR 980020.67 980533.b0 4.84 -213.24 -1.51 0.00 74.60 -135.30 -116.43													
: 3SIS123 44 3.51 -121 44.62 1867.81 OR 980038.78 980533.85 4.67 -209.01 -1.50 0.00 81.00 -124.84 -106.33													
: 3SIS124 44 3.42 -121 44.68 1826.67 OR 980046.31 980533.72 5.55 -204.40 -1.50 0.00 75.94 -124.36 -106.36													
: 3SIS140 44 10.28 -121 42.56 1804.42 OR 980058.64 980544.06 5.14 -201.91 -1.49 0.00 71.11 -127.16 -109.34													
: 3SIS141 44 11.44 -121 44.03 1877.57 OR 980043.39 980545.81 6.16 -210.10 -1.50 0.00 76.06 -126.78 -110.32													
: 3SIS142 44 12.26 -121 44.70 1766.32 OR 980069.40 980547.05 5.30 -197.65 -1.48 0.00 67.14 -126.70 -109.28													
: 3SIS143 44 14.24 -121 46.63 1767.84 OR 980080.82 980550.03 4.73 -197.82 -1.48 0.00 76.04 -118.53 -101.04													
: 3SIS144 44 13.85 -121 46.39 1840.99 OR 980060.52 980549.45 4.75 -206.01 -1.50 0.00 78.88 -123.87 -105.05													
: 3SIS145 44 12.94 -121 46.79 1901.95 OR 980044.15 980548.07 6.40 -212.83 -1.51 0.00 62.68 -125.26 -106.57													
: 3SIS146 44 13.47 -121 46.44 1874.52 OR 980052.57 980548.87 5.11 -209.76 -1.50 0.00 81.84 -124.31 -105.78													
: 3SIS147A 44 15.35 -121 45.96 1792.22 OR 980070.41 980551.70 4.98 -200.55 -1.49 0.00 71.47 -125.59 -107.67													
: 3SIS147B 44 15.35 -121 45.96 1792.22 OR 980070.39 980551.70 4.98 -200.55 -1.49 0.00 71.46 -125.60 -107.89													
: 3SIS148 44 15.68 -121 47.00 1610.87 OR 980111.63 980552.20 3.24 -180.26 -1.44 0.00 56.29 -122.17 -106.13													
: 3SIS149 44 15.67 -121 47.51 1588.01 OR 980118.90 980552.19 2.98 -177.70 -1.43 0.00 56.52 -119.93 -103.80													
: 3SIS150 44 15.62 -121 48.05 1624.58 OR 980110.94 980552.11 3.35 -181.79 -1.45 0.00 54.91 -119.98 -103.81													
: 3SIS151 44 15.62 -121 48.52 1607.82 OR 980118.47 980552.11 2.96 -179.92 -1.44 0.00 62.28 -116.12 -100.08													
: 3SIS152 44 15.43 -121 48.77 1604.77 OR 980114.36 980551.83 2.86 -179.57 -1.44 0.00 57.51 -120.65 -104.63													
: 3SIS153 44 15.17 -121 49.34 1584.96 OR 980115.95 980551.44 2.72 -177.36 -1.43 0.00 53.38 -122.69 -106.86													
: 3SIS154 44 14.94 -121 50.16 1557.53 OR 980122.96 980551.09 2.95 -174.29 -1.42 0.00 52.29 -120.48 -104.95													
: 3SIS155 44 14.74 -121 50.58 1545.34 OR 980126.88 980550.79 2.85 -172.92 -1.42 0.00 52.75 -118.75 -103.33													
: 3SIS156 44 14.48 -121 51.17 1539.24 OR 980126.67 980550.39 2.71 -172.24 -1.42 0.00 51.05 -119.90 -104.53													
: 3SIS157 44 15.90 -121 47.20 1584.96 OR 980118.22 980552.53 2.96 -177.36 -1.43 0.00 54.55 -121.28 -105.47													
: 3SIS158 44 16.15 -121 46.80 1560.58 OR 980123.44 980552.91 3.47 -174.63 -1.42 0.00 51.87 -120.71 -105.20													
: 3SIS159 44 16.65 -121 46.44 1511.81 OR 980131.75 980553.66 4.02 -169.17 -1.41 0.00 44.40 -122.16 -107.19													
: 3SIS160 44 17.10 -121 45.90 1492.00 OR 980134.46 980554.34 5.95 -166.95 -1.40 0.00 40.32 -122.38 -107.76													
: 3SIS161 44 17.52 -121 45.21 1463.04 OR 980142.51 980554.98 5.15 -163.71 -1.39 0.00 38.81 -121.14 -100.77													
: 3SIS200 43 53.09 -121 54.32 1510.28 OR 980088.05 980518.15 1.85 -169.00 -1.41 0.00 35.74 -132.81 -117.66													
: 3SIS201 43 54.82 -121 53.55 1655.98 OR 980060.49 980520.76 2.36 -185.30 -1.46 0.00 50.50 -133.90 -117.32													
: 3SIS202 43 55.30 -121 55.17 1673.05 OR 980055.35 980521.46 7.30 -187.21 -1.46 0.00 49.91 -131.47 -115.16													
: 3SIS203 43 54.91 -121 55.73 1872.69 OR 980044.09 980520.89 14.43 -209.55 -1.50 0.00 60.78 -135.84 -118.17													
: 3SIS204 44 8.71 -121 47.16 2804.16 OR 979823.51 980541.70 38.69 -313.79 -1.33 0.00 146.49 -129.94 -105.09													
: 3SIS205 44 9.31 -121 47.00 2812.40 OR 979824.62 980542.60 28.39 -314.71 -1.32 0.00 149.23 -138.44 -112.58													
: 3SIS206 44 8.39 -121 46.35 2499.36 OR 979893.48 980541.21 17.07 -279.68 -1.45 0.00 123.01 -141.05 -117.32													
: 3SIS207 43 53.16 -121 53.02 1624.28 OR 980075.54 980518.26 2.00 -181.76 -1.45 0.00 58.28 -122.87 -100.54													
: 3SIS208 43 53.77 -121 54.43 1542.29 OR 980063.07 980519.17 1.92 -172.58 -1.42 0.00 39.61 -132.47 -117.00													
: 3SIS209 43 53.57 -121 56.38 1595.63 OR 980070.63 980518.88 2.47 -176.55 -1.44 0.00 43.92 -133.60 -117.04													